

ABSTRACT

Establishment of hepatocytes is difficult. An object is to provide a means for preparing hepatocytes useful for hepatocyte transplantation therapy for liver injury, which comprises differentiating mesenchymal stem cells (the proliferation techniques of which have been established), and in particular, stroma cells, which are bone-marrow-derived mesenchymal stem cells, into hepatocytes. We have discovered that transplantation of human mesenchymal stem cells into the livers of mammals such as rats that have developed chronic liver injuries due to continuous administration of an agent can cause the human mesenchymal stem cells to differentiate into hepatocytes or mature hepatocytes. We have thus developed a means for differentiating mesenchymal stem cells into mature hepatocytes.